



August 9, 2001
Project No. 97664V3

Ms. Brenda Pohlmann
Nevada Division of Environmental Protection
555 E. Washington, Suite 4300
Las Vegas, NV 89101-1049

RE: Results of monthly surface water sampling of the Las Vegas Wash at the Northshore Road Bridge.

PROVIDING

- Geotechnical Engineering
- Construction Materials Engineering
- Environmental Engineering
- Drilling Services

Dear Ms. Pohlmann:

Per your request, Geotechnical & Environmental Services, Inc. (GES) obtained a surface water sample from the Las Vegas Wash on July 25, 2001 near the Northshore Road Bridge. We sent this sample, under chain-of-custody protocol, to NEL Laboratories (NEL) for laboratory analysis of perchlorate. NEL's analysis revealed a perchlorate concentration of 550 micrograms per Liter ($\mu\text{g/L}$). The NEL report is included with this letter, along with both a Perchlorate Summary Tables for 2000 and 2001.

Our services were performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable engineering firms in this or similar localities. No other warranty, either express or implied, is included or intended in this report. We appreciate this opportunity to provide our services. If you have any questions regarding these results, please feel free to call us at 365-1001.

Sincerely,
Geotechnical & Environmental Services, Inc.

Richard Cooke
Staff Geologist

Daniel C. Burns, C.E.M.*
#1692 (Expires 10/07/2001)
Project Manager

*"I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances."

Enc: 2000 & 2001 Perchlorate Summary Tables
NEL Analytical Report

Dist: 1 original mailed to addressee
1 faxed to addressee at 486-2863
cc: fax to Jeff Gibson, American Pacific Corporation
cc: mail to Kevin Mayer, USEPA SFD 72, 75 Hawthorne Street, San Francisco, CA 94105
cc: to project file 97664V3

**Las Vegas Wash at Northshore Road Bridge
2000 Summary of Perchlorate Concentrations**

Date Sampled	Perchlorate (µg/L)
1/27/00	569
2/28/00	720
3/29/00	870
4/27/00	750
5/30/00	740
6/28/00	410
7/27/00	650
8/28/00	510
9/27/00	430
10/26/00	340
11/29/00	370
12/26/00	320

**Las Vegas Wash at Northshore Road Bridge
2001 Summary of Perchlorate Concentrations**

Date Sampled	Perchlorate (µg/L)
1/25/01	280
2/27/01	350
3/27/01	480
4/26/01	320
5/29/01	240
6/27/01	400
7/25/01	550

NEL LABORATORIESReno • Las Vegas
Phoenix • So. CaliforniaLas Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: Geotechnical & Env. Serv.
7150 Placid
Las Vegas, NV 89119
ATTN: Dan Burns

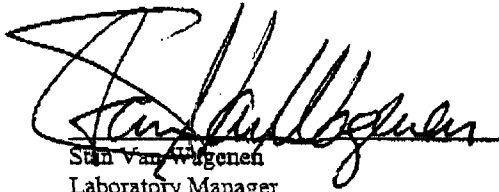
PROJECT NAME: FPF
PROJECT NUMBER: 97664 V3

NEL ORDER ID: L0107253

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 7/25/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.



Stan Van Wageningen
Laboratory Manager



Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF
PROJECT #: 97664 V3

CLIENT ID: North Shore Road Bridge
DATE SAMPLED: 7/25/01
NEL SAMPLE ID: L0107253-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	550	40.	10	EPA 314	µg/L	8/6/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

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CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF
PROJECT #: 97664 V3
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010806CLO4-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	ND	4	1	EPA 314	µg/L	8/6/01

D.F. - Dilution Factor

ND - Not Detected

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Reno • Las Vegas • Boise
Phoenix • Sacramento

Las Vegas Division • 4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577 • 888-368-3282

Company: GES Attention: Don Burns

Address

7150 Placid Street, Las Vegas, NV 89119

Phone Number: (702) 365-1001
Fax Number: (702) 341-7120

Expected Due Date: 7/1

Requested Turnaround: ☒ 5-day ☐ 2-day ☐ 1-day ☐ Other

[illegible]

0925/7/25/61	North Shore Road	01
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N.E.L. Identificat

1

Matrix (Box #1)

Preservative (Box #2)

Analysis

Remarks

Custody Seal intact? Y N None Temp. 1°C

Condition when received

Temp. 10°C

Relinquished by (Print) _____ (Signature) _____

Date/Time ~~7/24/02~~

ed by
(Print)

(Signature)

Date/Time

BOOK #1

DW - Drinking Water
 WW - Waste Water
 OL - Oil/Organic Liquid
 SD - Solid
 AQ - Aqueous
 A - Air

Box #2

A. HCl
B. HNO_3
C. H_2SO_4
D. NaOH

E. Ice Only
F. Other _____
G. Not Preserved: _____

Project Name: **EPF**

Purchase Order Number: 1993

Project Number: 97664113

Sampled By: R. Coole

1 st Richard Cottle	Richard Cottle	7/25/01	-1740	David Burns	David Burns	7/25/01	1340
2 nd Danyla Burns	Danyla Burns	7/25/01	1441/1340	Danyla Crockett	Danyla Crockett	7/25/01	1444
3 rd Danyla Crockett	Danyla Crockett	7/25/01	1555	A. F1000	A. F1000	7-28-01	1555

The liability for NEL sample aliquotes (i.e., is limited strictly to the price of sample analysis for those samples received in good condition by NEL. NEL is not responsible for loss, damage, resampling costs and/or qualified data related to samples not received in good condition, including adequate sample volume and number of containers. Customer signature of this CoC constitutes a purchase order for NEL to perform work and coexist with acceptance of all NEL Standard Terms and Conditions. Signature also constitutes acceptance of NEL Standard List Prices for all services ordered here on, except those specified otherwise via an NEL Quotation for Testing Services in effect at the time of sample receipt. NEL turnaround times are measured in regular working days. Samples received at the laboratory after 16:30 will be considered received on the next working day. Commitment of laboratory to the requested turnaround time will be confirmed via Sample Confirmation transmitted to the fax number provided above.

ORIGINAL